

SEQUENCE LISTING

<110> Takeda Pharmaceutical Company Limited

<120> Novel Screening Method

<130> G05-0036

<150> JP 2003-010001

<151> 2003-01-17

<150> JP 2003-104540

<151> 2003-04-08

<150> JP 2003-194497

<151> 2003-07-09

<150> JP 2003-329080

<151> 2003-09-19

<150> PCT/JP2004/000248

<151> 2004-01-15

<160> 22

<210> 1

<211> 361

<212> PRT

<213> Homo sapiens

<400> 1

```

Met Ser Pro Glu Cys Ala Arg Ala Ala Gly Asp Ala Pro Leu Arg Ser
      5      10      15
Leu Glu Gln Ala Asn Arg Thr Arg Phe Pro Phe Phe Ser Asp Val Lys
      20      25      30
Gly Asp His Arg Leu Val Leu Ala Ala Val Glu Thr Thr Val Leu Val
      35      40      45
Leu Ile Phe Ala Val Ser Leu Leu Gly Asn Val Cys Ala Leu Val Leu
      50      55      60
Val Ala Arg Arg Arg Arg Arg Gly Ala Thr Ala Cys Leu Val Leu Asn
      65      70      75
Leu Phe Cys Ala Asp Leu Leu Phe Ile Ser Ala Ile Pro Leu Val Leu
      80      85      90
Ala Val Arg Trp Thr Glu Ala Trp Leu Leu Gly Pro Val Ala Cys His
      95      100      105
Leu Leu Phe Tyr Val Met Thr Leu Ser Gly Ser Val Thr Ile Leu Thr
      110      115      120
Leu Ala Ala Val Ser Leu Glu Arg Met Val Cys Ile Val His Leu Gln
      125      130      135
Arg Gly Val Arg Gly Pro Gly Arg Arg Ala Arg Ala Val Leu Leu Ala
      140      145      150
Leu Ile Trp Gly Tyr Ser Ala Val Ala Ala Leu Pro Leu Cys Val Phe
      155      160      165
Phe Arg Val Val Pro Gln Arg Leu Pro Gly Ala Asp Gln Glu Ile Ser
      170      175      180
Ile Cys Thr Leu Ile Trp Pro Thr Ile Pro Gly Glu Ile Ser Trp Asp
      185      190      195
Val Ser Phe Val Thr Leu Asn Phe Leu Val Pro Gly Leu Val Ile Val
      200      205      210
Ile Ser Tyr Ser Lys Ile Leu Gln Ile Thr Lys Ala Ser Arg Lys Arg
      215      220      225
Leu Thr Val Ser Leu Ala Tyr Ser Glu Ser His Gln Ile Arg Val Ser
      230      235      240
Gln Gln Asp Phe Arg Leu Phe Arg Thr Leu Phe Leu Leu Met Val Ser
      245      250      255

```

260
 Phe Phe Ile Met Trp Ser Pro Ile Ile Thr Ile Leu Leu Ile Leu
 275 280 285
 Ile Gln Asn Phe Lys Gln Asp Leu Val Ile Trp Pro Ser Leu Phe Phe
 290 295 300
 Trp Val Val Ala Phe Thr Phe Ala Asn Ser Ala Leu Asn Pro Ile Leu
 305 310 315 320
 Tyr Asn Met Thr Leu Cys Arg Asn Glu Trp Lys Ile Phe Cys Cys
 325 330 335
 Phe Trp Phe Pro Glu Lys Gly Ala Ile Leu Thr Asp Thr Ser Val Lys
 340 345 350
 Arg Asn Asp Leu Ser Ile Ile Ser Gly
 355 360

<210> 2
 <211> 1083
 <212> DNA
 <213> Homo sapiens

<400> 2
 atgtcccttg aatgcgcgcg ggcagcgggc gacgcgcctt tgcgcagcct ggagcaagcc 60
 aaccgcaccc gctttccctt ctctccgac gtcaaggcg accaccggct ggtgctggcc 120
 gcggtggaga caaccgtgct ggtgctcctt ttgtcagttg cgctgctggg caactgtgtc 180
 gccctgtgtc tgggtggcgc cgcagcagcg cgcggcgcg ctgcctgcct ggtactcaac 240
 ctctctgtcg cggacctgtt ctctcatcag gctatccctc tgggtgctggc cgtgcgtcgg 300
 actgagccct ggctgctggg ccccggttgc tgccacctgc tcttctacgt gatgacctg 360
 agcggcagcg tcaccactct caccgtggcc gcggtcagcc tggagcgcat ggtgtgcct 420
 gtgcacctgc agcgcgcgct gcggggtcct gggcgccggg cgcgggcagt cctgctggcg 480
 ctctactggg gctattcggc ggtgcgcgct ctgcctctct gcgtctctct ccgactgctc 540
 cgcgaacggc tccccgcgc cgaccaggaa atttcgattt gcacactgat ttggccacc 600
 attctcgag agatctcgtt ggatgtctct tttgttactt tgaactctct ggtgccagga 660
 tgggtcattg tgatcagtta ctccaaatt ttacagatca caaaggcatc aaggaagg 720
 ctccaggtaa gcttgcccta ctccgagagc caccagatcc gcgtgtccca caggagcttc 780
 cggctcttcc gcacctctt ctctctcatg gtctcttctt tcactatgtg gagccccatc 840
 atcatcacca tctctctcat cctgatccag aacttcaagc aagacctggg catctggccg 900
 tctctcttct tctgggtggg ggccttcaca ttgtctaatt cagccctaaa ccccatctc 960
 tacaacatga cactgtgcag gaatgagtgg aagaaaattt ttgtctgctt ctggttccca 1020
 gaaaaggagg ccattttaac agacacatct gtcaaaagaa atgacttgct gattatttct 1080
 gcc 1083

<210> 3
 <211> 361
 <212> PRT
 <213> Mus musculus

<400> 3
 Met Ser Pro Glu Cys Ala Gln Thr Thr Gly Pro Gly Pro Ser His Thr
 5 10 15
 Leu Asp Gln Val Asn Arg Thr His Phe Pro Phe Phe Ser Asp Val Lys
 20 25 30
 Gly Asp His Arg Leu Val Leu Ser Val Val Glu Thr Thr Val Leu Gly
 35 40 45
 Leu Ile Phe Val Val Ser Leu Leu Gly Asn Val Cys Ala Leu Val Leu
 50 55 60
 Val Ala Arg Arg Arg Arg Gly Ala Thr Ala Ser Leu Val Leu Asn
 65 70 75 80
 Leu Phe Cys Ala Asp Leu Leu Phe Thr Ser Ala Ile Pro Leu Val Leu
 85 90 95
 Val Val Arg Trp Thr Glu Ala Trp Leu Leu Gly Pro Val Val Cys His
 100 105 110
 Leu Leu Phe Tyr Val Met Thr Met Ser Gly Ser Val Thr Ile Leu Thr
 115 120 125
 Leu Ala Ala Val Ser Leu Glu Arg Met Val Cys Ile Val Arg Leu Arg
 130 135 140

Arg Gly Leu Ser Gly Pro Gly Arg Arg Thr Gln Ala Ala Leu Leu Ala
 145 150 155 160
 Phe Ile Trp Gly Tyr Ser Ala Leu Ala Ala Leu Pro Leu Cys Ile Leu
 165 170 175
 Phe Arg Val Val Pro Gln Arg Leu Pro Gly Gly Asp Gln Glu Ile Pro
 180 185 190
 Ile Cys Thr Leu Asp Trp Pro Asn Arg Ile Gly Glu Ile Ser Trp Asp
 195 200 205
 Val Phe Phe Val Thr Leu Asn Phe Leu Val Pro Gly Leu Val Ile Val
 210 215 220
 Ile Ser Tyr Ser Lys Ile Leu Gln Ile Thr Lys Ala Ser Arg Lys Arg
 225 230 235 240
 Leu Thr Leu Ser Leu Ala Tyr Ser Glu Ser His Gln Ile Arg Val Ser
 245 250 255
 Gln Gln Asp Tyr Arg Leu Phe Arg Thr Leu Phe Leu Leu Met Val Ser
 260 265 270
 Phe Phe Ile Met Trp Ser Pro Ile Ile Ile Thr Ile Leu Leu Ile Leu
 275 280 285
 Ile Gln Asn Phe Arg Gln Asp Leu Val Ile Trp Pro Ser Leu Phe Phe
 290 295 300
 Trp Val Val Ala Phe Thr Phe Ala Asn Ser Ala Leu Asn Pro Ile Leu
 305 310 315 320
 Tyr Asn Met Ser Leu Phe Arg Asn Glu Trp Arg Lys Ile Phe Cys Cys
 325 330 335
 Phe Phe Phe Pro Glu Lys Gly Ala Ile Phe Thr Asp Thr Ser Val Arg
 340 345 350
 Arg Asn Asp Leu Ser Val Ile Ser Ser
 355 360

<210> 4
 <211> 1083
 <212> DNA
 <213> Mus musculus

<400> 4
 atgtccctcg agtgtgcaca gacgacgggc cctggccctt cgcacaccct ggaccaagtc 60
 aatcgacccc acttcccttt ctctcgggat gtcaaggggc accaccgggt ggtgtgtgagc 120
 gtcgtggaga ccacgtttct ggggctcatc ttgtgtctct cactgtctggg caactgttgt 180
 gctctagtgc tgggtggcgc cgtcggcgc cgtggggcga cagccagcct ggtgtctaac 240
 ctctctcggc cggatttgtc ctccaccagc gccatccctc tagtgcctgt cgtgcgttgg 300
 actgaggcct ggctgttggg gccctcgtc tcgcacctgc tcttctacgt gatgacaatg 360
 agcggcagcg tcacgatcct cacactggcc gcggtcagcc tggagcgcat ggtgtgcatc 420
 gtggcctctc ggcgcggcct gagcggtccg ggcggcgcca ctacggcgcc actgctggct 480
 ttcatatggg gttactcggc gctcggcggc ctgcccctct gcattcttgt ccgcgtggctc 540
 ccgacagcgc ttccggcgcg gaaccaggaa attccgattt gcacattgga ttggcccaac 600
 cgcataggag aaatctcatg ggaatgtttt ttgtgtactt gaaacttcct ggtgcgggga 660
 ctggctattg tgatcagtta ctccaaaatt ttacagatca cgaagacatc gcggaagagg 720
 ctacgcgtga gcttggcata ctctgagagc caccagatcc gatgtgccca acaagactac 780
 gactctctcc gcacgctctt cctgctcatg gtttctctt tcatctgtg gcgtcccatc 840
 atcatcacca tcctctctct ctgtatccaa aacttccggc aggacctggg catctggcca 900
 ttcctttttc tctgggtggg ggccttcacg ttgtccaaat ctgccctaaa cccatactg 960
 tacaacatgt cgctgttcag gaacgaatgg aggaagattt ttgtctgctt cttttttcca 1020
 gagaagggag ccatttttat agacacgtct gtcaggcgaa atgactgtgc tgtttatttc 1080
 agc 1083

<210> 5
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> primer

<400> 5

gctgtggcat gcttttaaac 20

<210> 6
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 6
cgctgtggat gtctatttgc 20

<210> 7
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> primer

<400> 7
agttcatttc cagtaccctc catcagtggc 30

<210> 8
<211> 361
<212> PRT
<213> Rattus norvegicus

<400> 8
Met Ser Pro Glu Cys Ala Gln Thr Thr Gly Pro Gly Pro Ser Arg Thr
 5 10 15
Pro Asp Gln Val Asn Arg Thr His Phe Pro Phe Phe Ser Asp Val Lys
 20 25 30
Gly Asp His Arg Leu Val Leu Ser Val Leu Glu Thr Thr Val Leu Gly
 35 40 45
Leu Ile Phe Val Val Ser Leu Leu Gly Asn Val Cys Ala Leu Val Leu
 50 55 60
Val Val Arg Arg Arg Arg Gly Ala Thr Val Ser Leu Val Leu Asn
 65 70 75
Leu Phe Cys Ala Asp Leu Leu Phe Thr Ser Ala Ile Pro Leu Val Leu
 80 85 90
Val Val Arg Trp Thr Glu Ala Trp Leu Leu Gly Pro Val Val Cys His
 95 100 105
Leu Leu Phe Tyr Val Met Thr Met Ser Gly Ser Val Thr Ile Leu Thr
 110 115 120
Leu Ala Ala Val Ser Leu Glu Arg Met Val Cys Ile Arg Leu Arg
 125 130 135
Arg Gly Leu Ser Gly Pro Gly Arg Arg Thr Gln Ala Ala Leu Leu Ala
 140 145 150
Phe Ile Trp Gly Tyr Ser Ala Leu Ala Ala Leu Pro Leu Cys Ile Leu
 155 160 165
Phe Arg Val Val Pro Gln Arg Leu Pro Gly Gly Asp Gln Glu Ile Pro
 170 175 180
Ile Cys Thr Leu Asp Trp Pro Asn Arg Ile Gly Glu Ile Ser Trp Asp
 185 190 195
Val Phe Phe Val Thr Leu Asn Phe Leu Val Pro Gly Leu Val Ile Val
 200 205 210
Ile Ser Tyr Ser Lys Ile Leu Gln Ile Thr Lys Ala Ser Arg Lys Arg
 215 220 225
Leu Thr Leu Ser Leu Ala Tyr Ser Glu Ser His Gln Ile Arg Val Ser
 230 235 240
Gln Gln Asp Tyr Arg Leu Phe Arg Thr Leu Phe Leu Leu Met Val Ser
 245 250 255
 260 265 270

Phe Phe Ile Met Trp Ser Pro Ile Ile Ile Thr Ile Leu Leu Ile Leu
 275 280 285
 Ile Gln Asn Phe Arg Gln Asp Leu Val Ile Trp Pro Ser Leu Phe Phe
 290 295 300
 Trp Val Val Ala Phe Thr Phe Ala Asn Ser Ala Leu Asn Pro Ile Leu
 305 310 315
 Tyr Asn Met Ser Leu Phe Arg Ser Glu Trp Arg Lys Ile Phe Cys Cys
 320 325 330 335
 Phe Phe Phe Pro Glu Lys Gly Ala Ile Phe Thr Glu Thr Ser Ile Arg
 340 345 350
 Arg Asn Asp Leu Ser Val Ile Ser Thr
 355 360

<210> 9
 <211> 1083
 <212> DNA
 <213> Rattus norvegicus

<400> 9
 atgtccctcg agtgtgcgca gacgacgggc cctggccctt cgcgaccccc ggaccaagtc 60
 aatcgacccc acttcccttt cttctcggat gtcaggggcg accaccggct ggtgctgagc 120
 gtccctggaga ccaccgttct gggactcatc tttgtggtct cactgctggg caacgtgtgt 180
 gccctgggtgc tgggtgggtgc ccgtcggcgc cgtggggcga cagtcagctt ggtgctcaac 240
 ctcttctgcy cggatttgc tttaccagc gccatccctc tagtgctcgt ggtgcgctgg 300
 actgaagcct ggcgtgctgg gcccgtcgtc tgccacctgc tcttctacgt gatgacctg 360
 agcggcagcy tcacgatcct caccgtggcc gcggtcagcc tggagcgcat ggtgtgcatc 420
 gtgcgctgcy ggcgcggctt gagcgcccg gggcgccgga cgacggcgcc gctgctggct 480
 ttcatattgg gttaactcgg cctcgccgcg ctgccctct gcattcttgt ccgctgggtc 540
 ccgacgcgc ttcccgccgg ggaccaggaa attccgattt gcacattgga ttggcccaac 600
 cgcatagga aaattctcat ggaatgtgtt tttgtgact tgaacttctc ggtaccagga 660
 ctggtcattg tgatcagcta ctccaagatt ttacagatca cgaagcctc gcggaagagg 720
 cttacgctga gcttggcata ctccgagagc caccagatcc gagtgtccca gcaggactac 780
 cggtctcttc gaacgctctt cctgctcatg gtttcttct tcatcatgtg gagtcccatc 840
 atcatcacca tcttctctat cttgatccag aacttccggc aggcctgggt tatctggcgc 900
 tcccttttct tctgggtggg ggccttcacg ttgccaact ccgccttaaa ccccatctg 960
 tacaacatgt cgctgttcag gagcgagtgg aggaagattt tttgctgctt ctttttccca 1020
 gagaaggag ccatttttac agaaacgtct atcaggcgaa atgacttgct tgtattttcc 1080
 acc 1083

<210> 10
 <211> 19
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> primer

<400> 10
 gtgtggcct tcacgtttg 19

<210> 11
 <211> 19
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> primer

<400> 11
 cgctcctgaa cagcgacat 19

<210> 12
 <211> 26
 <212> DNA

<213> Artificial Sequence
 <220>
 <223> probe
 <400> 12
 caactcggcc ctaaacccca ttctgt 26
 <210> 13
 <211> 33
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> primer
 <400> 13
 gtcgacatgt cccctgagtg tgcgcagacg acg 33
 <210> 14
 <211> 33
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> primer
 <400> 14
 gctagcttag gtggaaataa cagacaagtc att 33
 <210> 15
 <211> 23
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> primer
 <400> 15
 tccgagtgtc ccaacaagac tac 23
 <210> 16
 <211> 24
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> primer
 <400> 16
 gactccacat gatgaagaag gaaa 24
 <210> 17
 <211> 22
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> probe
 <400> 17
 ccgcacgctc ttctgtctca tg 22
 <210> 18

<211> 19
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> primer

 <400> 18
 gtggtgacct tcacgtttg 19

 <210> 19
 <211> 19
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> primer

 <400> 19
 cgctcctgaa cagcgacat 19

 <210> 20
 <211> 26
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> probe

 <400> 20
 caactccgcc ctaaacccca ttctgt 26

 <210> 21
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> base sequence of the sense strand of siRNA m14i561

 <220>
 <221> misc_DNA
 <222> (20)..(21)
 <223> n stands for deoxy thymidine

 <400> 21
 ggaccaggaa auuccgauun n 21

 <210> 22
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> base sequence of the antisense strand of siRNA m14i561

 <220>
 <221> misc_DNA
 <222> (1)..(2)
 <223> n stands for deoxy thymidine

 <400> 22
 nncuggucc uuaagguca a 21